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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/829,177

04/09/2001

John C. Goodwin III

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EXAMINER

LEE, DIANE I

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

22

Office Action Summary

Application No.

09/829,177

Applicant(s)

GOODWIN, JOHN C.

Examiner

D. I. Lee

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Receipt is acknowledged of the Amendment filed 08 March 2004. Claims 13-18 have been canceled; and claims 19-23 have been newly added. Currently, claims 19-23 are pending in this application.

Specification

2. The amendment filed 08 March 2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

- (a) Vertical aperture 102 ... is large enough to illuminate a normal size item.
- (b) Horizontal aperture 100 is located within top surface 108 of housing 110 and is large enough to illuminate a normal size item. In this embodiment, vertical aperture 102 is larger than horizontal aperture 100.
- (c) Preferably, checkout device 30 may be easily adapted to fit in a typical checkout counter 106. It is envisioned that top surface 108 be made substantially flush with the top surface 112 of counter 106.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 19 and 21-22 are remain rejected under 35 U.S.C. 103(a) as being unpatentable over Johnsen [US 5,151,684, previously cited by the applicant] in view of Lindacher [US 5,196,696-newly cited by the Examiner].

Johnsen discloses a system (see the abstract, and figures 3-4), comprising:

a bar code reader (scanner 50) included in a housing 52 suitable for operating within a checkout counter (a cash register 130, see figures 3-4 and 7);

a computer 72, 76 as a control circuitry for determining whether bar code label information exists in the electrical signals and, if so, for determining first identification information from the bar code label information (see col. 7, lines 30-57);

a radio frequency product label interrogator 74, in the same housing, coupled to the bar code reader for transmitting a wireless interrogation signal to determine whether the item is labeled with a radio frequency product label (see figures 3-4 and 7);

a communication port (the connecting hardware that allows communications between the bar code reader 50, control circuitry, and the radio frequency product label interrogator 74, the connecting hardware provides an alternative or additional peripheral connection, such as radio frequency product label interrogator 74 to the control circuit) (see figure 2);

wherein the control circuitry obtains first identification information from the bar code reader and the radio frequency product label interrogator obtains second identification information from the item, i.e., if the item has a bar code label, obtaining the first identification information by the bar code reader; and if the item has a radio frequency product label, obtaining the second identification information by the radio frequency product label interrogator. Figure 7 shows the tag having both the bar code label and the radio frequency product label, identifying the item using both the first and second identification information (see col. 7, lines 14+; col. 9, lines 13+; and figures 4 and 7); and

wherein the control circuitry also generates output information including obtained identification information (see col. 7, lines 55+).

Johnsen does not disclose the communication port is a serial port.

However, providing a notoriously old and well-known serial communication port in the system of Johnsen would have been an obvious modification in an arrangement of the circuit/component design to an artisan of ordinary skill in the art at the time of the invention for the serial and/or the parallel arrangement of the data communication would have been an obvious variation in circuit/component design of the system to communicate between the bar code reader, control circuitry, and the radio frequency product label interrogator.

Johnsen is also silent with respect to the specific claimed structure of the bar code reader.

Lindacher discloses a bar code reader 10 in the housing 40 suitable for mounting within a checkout counter (see figures 2 and 4), the bar code reader including

- a laser 12 for generating a laser beam 26 (see figure 2);

- an optical transceiver 46, 48 for passing the laser beam through the surface containing the first aperture (i.e., the window through, which the outgoing scan line 30 exits the housing) and for collecting light reflected from an item through a substantially horizontal surface containing the second aperture (i.e., the window 48 through, which the incoming reflected light 32 enters to the housing) (see figures 1-2);

- a rotating spinner 16, which serves as a mirrored polygon spinner, for directing the laser beam from the optical transceiver and directing the light reflected from the item to the optical transceiver (see col. 2, lines 35 and figures 1-2);

- a plurality of pattern mirrors 18 for creating a scan pattern from the laser beam received from the rotating spinner 16 and for collecting the light reflected from the item (see col. 2, lines 41+ and figures 1-2); and

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a photo-detector 24 for converting the light reflected from the item into electrical signals (see col. 2, lines 63+).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the bar code reader of Lindacher in the system of Johnsen in order to provide a counter rotating bar code reader that produce an omnidirectional pattern and capable of scanning bar code information on item having a wider range in size.

Johnsen as modified by Lindacher does not disclose the surface containing the first aperture (i.e., the window through, which the outgoing scan line 30 exits the housing) is substantially vertical surface.

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to modify the optic components in the housing to provide the exit window in any well suited location of the housing, since the location of the exit window depends on the light travel direction along with the target location respect to the reader. Accordingly, it would have been an obvious extension taught by Johnsen as modified by Lindacher.

5. Claims 20 and 23 are remain rejected under 35 U.S.C. 103(a) as being unpatentable over Johnsen as modified by Lindacher as applied to claim 13 above, and further in view of Walter et al. [US 5,992,570-referred as Walter, previously cited by the applicant]. The teachings of Johnsen as modified by Lindacher have been discussed above.

Johnsen as modified by Lindacher fails to teach the system having a scale within the housing.

Walter teaches an item processing device having a bar code reader and a scale within the housing 16 for obtaining weight information for item sold by weight (see col. 4, lines 35+ and figure 1); wherein the output information includes obtained weight information (see col. 4, line 62-col. 5, lines 5 and figure 12).

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It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate a scale within the housing, as taught by Walter, in the system of Johnsen as modified by Lindacher, in order to process items that do not carry a bar code, such as fruits and vegetables.

Response to Arguments

6. Applicant's arguments filed 08 March 2004 have been fully considered but they are not persuasive.

7. In response to applicant argument that the reference fail to teach or suggest integration of an RFID reader into a dual-aperture bar code reader the though a communication port internal to the bar code reader as claimed (see page 18, lines 21+), the examiner points out that Johnsen as modified by Lindacher teaches all claimed feature except the surface containing the first aperture (i.e., the window through, which the outgoing scan line 30 exits the housing) is substantially vertical surface. However, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to modify the optic components in the housing to provide the exit window in any well suited location of the housing, since the location of the exit window depends on the light travel direction along with the target location respect to the reader. Accordingly, it would have been an obvious extension taught by Johnsen as modified by Lindacher. Further, since applicant has not disclosed that such structure would solve any stated problem or is for any particular purpose and it appears that the invention would perform equally well with other orientation structure of the surface containing the first aperture. Therefore, applicant's argument on this point is not persuasive (see the discussion above).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. I. Lee whose telephone number is (571) 272-2399. The examiner can normally be reached on Monday through Thursday from 5:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



D. I. Lee
Primary Examiner
Art Unit 2876

D. L.